IN THE CLAIMS

1. (Allowed) A method of processing that includes conditioning a workpiece surface influencing device, the workpiece surface influencing device being used during at least a portion of at least one electrochemical mechanical process that operates upon a workpiece using a solution, the method comprising:

operating upon the workpiece using the solution in the electrochemical mechanical process, with the workpiece surface influencing device being disposed in proximity to the workpiece for a period of time during the electrochemical mechanical process, the electrochemical mechanical process also resulting in accumulation of conductive particles onto the workpiece surface influencing device; and

conditioning the workpiece surface influencing device before performing another electrochemical mechanical process, the step of conditioning including applying a potential difference between an electrode and a conditioning member, the application of the potential difference during the step of the conditioning resulting in one of the number of accumulated conductive particles being reduced and the size of the accumulated conductive particles being reduced.

2. (Allowed) The method according to claim 1 further including the step of performing the another electrochemical mechanical process.

3. (Allowed) The method according to claim 2 wherein the electrochemical mechanical process is a first electrochemical mechanical deposition process and the another electrochemical mechanical process is a second electrochemical mechanical deposition process.

4. (Allowed) The method according to claim 3 wherein the first electrochemical mechanical deposition process operates upon the workpiece and the second electrochemical mechanical deposition process operates upon another workpiece that is different from the workpiece.

5. (Allowed) The method according to claim 3 wherein the first electrochemical mechanical deposition process operates upon the workpiece and the second electrochemical mechanical deposition process operates upon the workpiece.

6. (Allowed) The method according to claim 2 wherein the electrochemical mechanical process is an electrochemical mechanical deposition process and the another electrochemical mechanical process is an electrochemical mechanical etching process.

7. (Allowed) The method according to claim 6 wherein the electrochemical mechanical deposition process operates upon the workpiece and the electrochemical mechanical etching process operates upon the workpiece.

8. (Allowed) The method according to claim 1 wherein the electrochemical mechanical process is an electrochemical mechanical deposition process and the conductive particles that are reduced in the step of conditioning are formed and accumulated during the electrochemical mechanical deposition process.

9. (Allowed) The method according to claim 1 wherein the electrochemical mechanical process is an electrochemical mechanical etching process and the conductive particles that are reduced in the step of conditioning are formed and accumulated during the electrochemical mechanical etching process.

10. (Allowed) The method according to claim 93 wherein the non-conductive particles are reduced in the step of conditioning.

14. (Allowed) The method according to claim 10 wherein the step of conditioning further includes:

establishing frictional mechanical contact between the workpiece surface influencing device and the conditioning member.

15. (Allowed) The method according to claim 14, wherein the step of conditioning rotates the conditioning member against the workpiece surface influencing device.

16. (Allowed) The method according to claim 14, wherein the step of conditioning moves the conditioning member in a lateral direction against the workpiece surface influencing device.

20. (Allowed) The method according to claim 2 wherein the electrochemical mechanical process is a plurality of electrochemical mechanical processes and the another electrochemical mechanical process is another plurality of electrochemical mechanical processes.

21. (Allowed) The method according to claim 20 wherein the plurality of electrochemical mechanical processes includes an electrochemical mechanical deposition process and an electrochemical mechanical etching process.

22. (Allowed) The method according to claim 21 wherein the another plurality of electrochemical mechanical processes includes another electrochemical mechanical deposition process and another electrochemical mechanical etching process.

23. (Allowed) The method according to claim 20 wherein the plurality of electrochemical mechanical processes includes a first electrochemical mechanical deposition process and an electrochemical mechanical etching process and a second electrochemical mechanical deposition process.

24. (Allowed) The method according to claim 23 wherein the another plurality of electrochemical mechanical processes includes another first electrochemical mechanical deposition process and another electrochemical mechanical etching process and another second electrochemical mechanical deposition process.

25. (Allowed) The method according to claim 1 wherein during the step of operating upon the workpiece using the solution in the electrochemical mechanical process, the workpiece surface influencing device contacts the workpiece during the period of time.

26. (Allowed) The method according to claim 1 wherein during the step of operating upon the workpiece using the solution in the electrochemical mechanical process, the workpiece surface influencing device does not contact the workpiece during the period of time.

27. (Allowed) The method according to claim 1 wherein during the step of operating, the solution flows through channels formed in the workpiece surface influencing device, and during the step of conditioning, the conductive particles formed within the channels are reduced.

28. (Allowed) The method according to claim 27 wherein during the step of operating, the solution flows through channels formed in the workpiece surface influencing device, and during the step of conditioning, the conductive particles associated with the electrochemical mechanical processing that are formed within the channels are reduced.

29. (Allowed) The method according to claim 8 wherein during the step of operating, the solution flows through channels formed in the workpiece surface influencing device, and during the step of conditioning, the conductive particles associated with the electrochemical mechanical deposition that are formed within the channels are reduced.

30. (Allowed) The method according to claim 1 further including the step of removing the workpiece from being disposed in proximity to the workpiece surface influencing device upon completion of the operating step; and

wherein the step of conditioning includes the step of bringing the conditioning member in proximity to the workpiece surface influencing device so that the step of conditioning can then occur.

31. (Allowed) The method according to claim 30 wherein the steps of removing and bringing both use a holder, and the holder holds the workpiece during the step of operating and the holder holds the conditioning member during the step of conditioning.

35. (Allowed) The method according to claim 1 wherein the step of conditioning further includes:

establishing frictional mechanical contact between the workpiece surface influencing device and the conditioning member.

36. (Allowed) The method according to claim 35 wherein the step of establishing frictional mechanical contact established that contact using brushes that are part of the conditioning member.

37. (Allowed) The method according to claim 35, wherein the step of conditioning rotates the conditioning member against the workpiece surface influencing device.

38. (Allowed) The method according to claim 35, wherein the step of conditioning moves the conditioning member in a lateral direction against the workpiece surface influencing device.

39. (Allowed) The method according to claim 31 wherein the step of conditioning further includes:

establishing frictional mechanical contact between the workpiece surface influencing device and the conditioning member.

40. (Allowed) The method according to claim 39, wherein the step of conditioning rotates the conditioning member against the workpiece surface influencing device.

41. (Allowed) The method according to claim 39, wherein the step of conditioning moves the conditioning member in a lateral direction against the workpiece surface influencing device.

68. (Allowed) A method of processing a workpiece and removing particles on a workpiece surface influencing device, the workpiece surface influencing device being used in conjunction with a plating solution to process the workpiece, comprising:

applying a first potential difference between an electrode and the workpiece;

depositing, via the plating solution, conductive material onto the workpiece in the presence of the first potential difference with a top surface of the workpiece surface influencing device in close proximity to the workpiece; and

moving a conditioning member having at least one mechanical contact member against the top surface of the workpiece surface influencing device so that at least a portion of the particles that accumulate on the workpiece surface influencing device during the depositing of the conductive material are mechanically removed from the workpiece surface influencing device.

69. (Currently Amended) The method according to claim 68, wherein the at least one mechanical contact member comprises a plurality of conductive brushes and **[during the step of,]** further including the step of applying a second potential difference to the plurality of conductive brushes that will assist in removing the particles from the workpiece surface influencing device.

70. (Allowed) The method according to claim 69, wherein the step of moving causes relative rotational motion between the at least one mechanical contact member and the workpiece surface influencing device.

71. (Allowed) The method according to claim 70, wherein the step of moving causes relative lateral motion between the at least one mechanical contact member and the workpiece surface influencing device.

72. (Allowed) The method according to claim 68, wherein the step of moving causes relative motion between the at least one mechanical contact member comprising a plurality of brushes and the workpiece surface influencing device.

73. (Currently Amended) The method according to claim 68, wherein the workpiece surface influencing device includes a plurality of channels through which the plating solution passes, and during the step of moving the plating solution continues to pass through the plurality of channels, and**[,]** during the step of moving applying a second potential difference between the electrode and the at least one mechanical contact member of the conditioning member, the second potential difference being of an opposite polarity to the first potential difference that will assist in removing the conductive particles from the workpiece surface influencing device.

74. (Allowed) The method according to claim 68 further including the steps of

removing the workpiece from being disposed in proximity to the workpiece surface influencing device upon completion of the operating step; and

bringing a conditioning member in proximity to the workpiece surface influencing device so that the step of conditioning can then occur.

75. (Allowed) The method according to claim 74 wherein the steps of removing and bringing both use a holder, and the holder holds the workpiece during the step of depositing and the holder holds the conditioning member during the step of moving.

79. (Allowed) A method of processing including reducing accumulation of particles on a workpiece surface influencing device, the workpiece surface influencing device being used in conjunction with a plating solution to operate upon a first and second workpiece, comprising:

depositing, with the workpiece surface influencing device in close proximity to the first workpiece, first conductive material onto the first workpiece using the plating solution, and during depositing causing relative rotational motion in a first rotational direction between the workpiece surface influencing device and the first workpiece;

replacing the first workpiece with the second workpiece;

depositing, with the workpiece surface influencing device in close proximity to the second workpiece, second conductive material onto the second workpiece, and during depositing causing relative rotational motion in a second rotational direction opposite the first rotational direction between the workpiece surface influencing device and the second workpiece so that at least a portion of the particles that accumulate on the workpiece surface influencing device during the depositing of the first conductive material are removed from the workpiece surface influencing device.

80. (Allowed) The method according to claim 79 wherein the steps of causing relative rotation rotates one of the workpiece surface influencing device and the first or second workpiece.

81. (Allowed) The method according to claim 79 wherein the steps of causing relative rotation rotates both the workpiece surface influencing device and the first or second workpiece.

93. (Allowed) The method according to Claim 1, wherein the electrochemical mechanical process also results in accumulation of non-conductive particles onto the workpiece surface influencing device.

IN THE DRAWINGS

Applicants submit herewith substitute formal drawing sheets for Figs. 1, 4, 7A, 7D, 15 and 16, together with corresponding marked-up sheets showing the requested changes:

Fig. 1: Lead line from numerals 11 and 12 have been changed to a solid line;

Fig. 4: The lead line from numeral 13 has been moved to point to the barrier layer;

Fig. 7A: Numeral 106 has been corrected to 108.

Fig. 7B: Lead line from numeral 504 has been changed to an arrow;

Fig. 7C: Lead line from numeral 504A has been changed to an arrow;

Fig. 7D: Lead line from numeral 508 points to a particle (specification: page 14, line 4); Lead line and numeral 504A pointing to the sidewall have been added;

Fig. 7E: The arrow from numeral 600 has been change to a lead line

Fig. 15: The member has been seated to proper perspective; the dimensions of the driving motor 332 have been put into proper perspective; and the wheel 336 is open at the ends;

Fig. 16: The arrow leading from the hole 422 has been removed.